

**METHODS, SYSTEMS AND COMPUTER PROGRAM PRODUCTS  
FOR DYNAMIC SCHEDULING AND MATRIX COLLECTING  
OF DATA ABOUT SAMPLES**

**Abstract of the Disclosure**

5 Data is collected about samples that possess characteristics that change over time and that are contained in an array of containers that are arranged in a container spatial relationship. A matrix of cells is displayed in a cell spatial relationship that  
10 corresponds to the container spatial relationship. User input is accepted into at least one of the cells of the matrix that is displayed, to input at least one value of at least one of the characteristics that change over time for at least one of the samples that correspond to the at least one of the cells in the matrix that is displayed. The matrix user interface can allow a user to enter a large number of data points per minute,  
15 compared to conventional systems in which a user may need to swipe a bar code, enter an indicia or enter a row/column position for a sample prior to entering data. Data collection of characteristics of samples also can be scheduled, by storing past values of the characteristics of the samples that were data collected during at least one past time interval in a database, and also storing rules in a rule base. The rules  
determine whether a characteristic of a sample is to be data collected and, if so, identify the characteristic which is to be data collected, based on the past values of characteristics of samples. The rules are applied to the past values that are stored in the database, to identify target samples to be data collected, and to identify at least one target characteristic to be data collected for the target samples that are identified.